

ABSTRACT

The present invention provides a Bi2223 based thick film that does not peel off when a thermal or a mechanical shock is applied to a base or an oxide superconductor thick film or the like in the middle of a manufacturing process and a method of manufacturing the same. An oxide superconductor paste 1 having a mixing ratio of Bi2212 composition is applied to a base 3, dried, burned, and thereafter burned at a temperature approximate to its melting point to obtain a partially molten layer 4. Next, an oxide superconductor paste 2 having a mixing ratio of Bi2223 composition is applied to the partially molten layer 4, dried, burned, compressed by a CIP, and thereafter repeatedly burned and compressed for a predetermined number of times to obtain the base 3 having a desired superconductor thick film 5 formed thereon.